CHART 3.—*Maternal and Infant Mortality (Cesarean Section and Other Methods)*

	1925-1929		1929-1934	
	Cesarean Section	Other Methods	Cesarean Section	Other Methods
Per cent maternal deaths.	4.7%	5.9%	2.2%	4%
Per cent infant deaths.	24%	68%	15.5%	42.2%

as a method of choice in most cases of placenta praevia, regardless of type, rather than as a measuse of last resort which will and has decreased both the maternal and infant mortality.

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DISCUSSION

THOMAS F. WIER, M. D. (911 Medico-Dental Building, San Diego).—County and city hospitals are considered by many physicians dumping grounds for incurables, or places to send emergency patients to die. The report of Doctors Leon J. Tiber and J. L. Goldenberg of Los Angeles shows excellent results, as treated in such institutions. Also that we are saving more mothers and infants by use of the cesarean section. It would be interesting to know what type of placenta praevia were sectioned, and how many of them were transfused before and after operation. Were the cesarean sections of the low cervical type? Were they packed? Perhaps the low-flap type of section has contributed very much in lowering the maternal and fetal mortality. Most of the public institutions are not prepared with donors who may be available for emergencies. If the physicians give their time and services gratis to the public, why could not the institutions require the healthy ones to be typed and be ready themselves to render service to their fellow man?

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HENRY A. STEPHENSON, M. D. (490 Post Street, San Francisco).—The authors have given us an enlightening discussion on a most difficult problem in obstetrics. Comparison of the two periods shows a marked improvement in mortality of both mother and baby in the second period. Comparison of the figures shows a much more conservative type of treatment in the second period, in that there was a much higher percentage of spontaneous births. Version and extraction did not prove so popular in the second period. We agree with the authors, as brought out by the authors in the latter part of their paper, that in certain well-selected cases cesarean section does give a much better result for both mother and baby. Certainly, fetal mortality is very greatly reduced when cesarean section is employed, and is probably the most forceful argument in favor of this procedure.

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E. M. LAZARD, M. D. (1930 Wilshire Boulevard, Los Angeles).—The statistical review of the cases of placenta praevia on our services at the Los Angeles General Hospital from 1925 to 1934, by Doctors Tiber and Goldenberg, is of interest as showing the apparent greater safety of cesarean section in the treatment of these conditions than the other more strictly obstetrical methods.

This is also in accord with the results quoted from other clinics. However, in evaluating these results, one must take into consideration the many factors which should influence the choice of method in any given case. Undoubtedly, with both mother and baby in good condition, and sufficient findings to warrant the diagnosis of placenta praevia, section, together with adequate supportive treatment, offers the best results for both mother and baby.

The proper supportive treatment (intravenous gum acacia and blood transfusions, where indicated) should be emphasized.

In the first series of sixty-nine cases with a mortality of 6.9 per cent, there were twenty-seven cases of version and extraction with a mortality of 11 per cent, and twenty-one sections with a mortality of 4.7 per cent. The versions and extractions are divided into the Braxton-Hicks version and extraction, and "version and extraction."

It would be interesting to know how soon after the Braxton-Hicks versions, which presumably were done through an incompletely dilated os, the extraction was done. After a Braxton-Hicks version for placenta praevia, the labor should be allowed to proceed until complete dilatation before the extraction is completed. Also, in the "versions and extraction" how much dilatation was present?

The cause of death in one of these cases was rupture of the uterus; so, evidently, conditions were not favorable for a version and extraction.

The second series of 194 cases, from 1929 to 1934, show better results. In this series, thirty-four cases of version and extraction without any deaths; forty by insertion of bag; 45 by section, with one death; thirteen by rupture of membranes, with one death from puerperal sepsis; six by forceps; six by packing; and three by hysterectomy. In the case of the four other deaths, one undelivered, and one of postpartum hemorrhage, one eclamptic toxemia, and one from shock due to loss of blood; the method of treatment of the placenta praevia is not recorded. These figures show the fallacy of drawing any deductions from small series of cases, as pointed out by the authors, since we have thirty-four cases of version without mortality, as against twenty-seven cases of version and extraction with a mortality of 11 per cent in the first series.

The value of such statistical reviews of our work is apparent, but in evaluating them we should ever keep in mind the numerous factors which need to be considered. Our final conclusion from this review must be that in the treatment of placenta praevia. Cesarean section should have a very important place; but that, before deciding on any method treatment, all factors must be taken into consideration and the other methods, such as the pack, the bag, and version, all have their definite place, and, lastly and probably most important, that proper supportive treatment by intravenous medication and blood transfusion should be used where indicated, whatever the method of delivery.

PUBLIC HEALTH SIGNIFICANCE OF THE DIETARY HABITS OF PEOPLE ON RELIEF*

By ALBERT E. LARSEN, M.D.
San Francisco

THERE are now about twenty million people in the United States on the active relief roll. Most of these have appeared on the "charity" list since the winter of 1930. This increase includes people from all walks of life: those who have been drifters and were used to the rigors of scanty living conditions, others whose living conditions were always borderline, and those who were accustomed to the surroundings and habits which we associate with sedentary living. These people present a public-health problem of tremendous significance. They must be provided with a plan of living that is practical to the administration and economically possible with the available funds. This is, indeed, a matter of great complexity.

SOCIAL WELFARE SUPERVISION BECAME A BIG BUSINESS

The small group of trained social workers who were devoting their lives to problems of local significance a few years ago, suddenly found them-

* From the Central Medical Bureau.

selves in the newest and biggest business of the United States. To distribute the huge sum of money necessary to operate this in the most effective manner, to care for the wants of a totally dependent group completely, led to great confusion in the beginning. Methods that were adaptable to small numbers of a more or less homogeneous group had to be stretched to care for a heterogeneous group on a national basis.

EMERGENCY RELIEF ADMINISTRATION

The situation was actually an emergency and as such the Emergency Relief Administration was well named. Many methods were tested and discarded or modified with startling rapidity, and out of the chaos there seems to be emerging a well-organized and efficient system. Today the word "emergency" can no longer describe the situation. Those who are close to the situation believe that these methods will be used to care for the people on relief for an indefinite period. With light beginning to show in the actual mechanics of the administration, sufficient time will be released to study some of the implications of this movement.

THE WELFARE SITUATION AS A PUBLIC HEALTH PROBLEM

We shall not concern ourselves at this moment with the political, economical, or other possible considerations, but shall look upon this group as a public-health problem. There are many factors that may be considered under this heading, all of which affect health, as housing conditions, mental influences, opportunity for preventive procedures such as vaccination, availability of medical care and nutrition. We shall concern ourselves with the nutrition problem that these people present.

One out of every six people in the United States must have an artificial world of living conditions prepared for them. They are almost entirely dependent on the theories and efficiency of the relief administration. Will improper care of these people produce public-health problems of far-reaching consequences, or can the administration deal with the group with foresight to prevent them?

MORBIDITY STATISTICS OF CITIZENS ON RELIEF

As physicians, we know that lifetime habits are not easily changed. A recent survey made in Boston has shown that the incidence of illness among people whose comfortable circumstances were suddenly reduced was a great deal higher than that in a corresponding group who were inured to the hardships of lower living conditions. With the standards of all reduced to a minimum for an indefinite period of time, these must be of such a nature that the group will have sufficient protection from the hazards of long-continued inadequacies.

FOOD HABITS: FOOD BASKETS OR CASH EQUIVALENTS

In the matter of food habits, we must consider the problem in a broad sense. In general, the people in rural districts who raise their own produce will have access to a greater variety in amounts of food for less cost than in an urban center, where one is dependent entirely on what his cash allowance will purchase. Until March, 1934, the people of San Francisco on relief were supplied with food by the commissary system, that is, boxes of food were distributed to families, fresh milk was delivered and, in addition, a weekly stipend was allowed for the purchase of fresh meat. After this date the system of providing food was changed to a cash basis. The budget of the clients was increased so that food could be purchased as they desired. Many discussions arose as to the effectiveness and desirability of the two methods. Surveys of various natures were made to determine a choice. The clients, when circularized, almost unanimously desired the cash basis. Some of the factors responsible for this choice were the variety of selection possible, the mental uplift in purchasing their food as other members of the community, the social implications of the relief box being dropped on their doorstep, and the complaint of the neighborhood grocers over the loss of business. The administration was in favor of the cash method because it reduced the overhead and prevented the waste attendant on the box. Many items of the boxes were never used because they did not happen to be the choice of the family. Such things as canned milk, cocoa, macaroni and spaghetti accumulated on their shelves and were never used.

EFFECTS OF THE TWO METHODS

From a public-health viewpoint, one cannot say at present which method is the better. The only information at hand is the nutritional survey of 4,500 children on relief made for the Department of Public Health of this city by Dr. J. C. Geiger and Dr. Paul S. Barrett in the latter part of 1934. This group had been receiving their food on a commissary basis for periods varying from six months to two years. The conclusion of the survey was that the nutritional status of these children was quite adequate. In 1932, in New York, the average sum per family for total maintenance was $51.35 per month. In 1935 it was $42.15 per month. Under the present food budget each person in a family is allowed eight cents per meal, and the percentage of malnutrition among children has risen from 13.5 per cent in 1927 to 18.1 per cent in 1934. Since the cash relief system has been in vogue, no statistics have been gathered in San Francisco. We are now only able to predict what might happen under the present system. The dietary requirements of the family are being supplied by standards computed from the Okey-Huntington diet; this allows between seven and eight cents per meal. Theoretically, this is quite adequate and the amount of cash supplied allows the client variation and selections of their choice of foods. This was worked out for the State of California and includes a greater proportion of fresh fruits and vegetables than the average relief diet elsewhere, which are higher in cereal, cereal products, dried beans, etc. While this list, if followed accurately, is quite adequate for the dietary

needs, there are certain practical difficulties which must be considered. A recent survey made by the Heller Committee to determine the food habits of people on relief has shown some interesting facts; people who have a minimum amount to spend select concentrated foods in preference to leafy vegetables and fresh fruits. The Heller Committee concluded that the average diet was deficient in vitamins B and C, in iron, and was below the normal caloric value. There are several reasons for this. The monotony of selection is probably an outstanding factor, as is shown by the desire for such articles as shredded wheat, peanut butter, and other tasty prepared foods. Whole-wheat bread was not purchased in the proportion one might have expected. When a family goes on a "taste bud spree" their budget becomes considerably unbalanced for a corresponding following period. Another reason is that the rent provision in the family budget is low, especially for San Francisco. This means that people will select living conditions that are not in accord with their means, and will use their food money to make up the difference. These points suggest that, while the budget is theoretically sufficient to provide adequate food, there will be periods of deprivation to meet these emergency expenses. Education as to the proper use of their money in purchasing foods is one thing theoretically, but to educate the masses to change from taste selection to a physiologic selection is an ideal that is rarely successful, even with the individual living under the best of conditions. Even in a small, controlled community, whose families were carefully handpicked and definitely represent the upper strata of relief clients, the entire life of the family must be planned to make both ends meet. A trained social worker must meet with the housewives to determine what to buy with the budget money. Without such supervision it is a question whether they could come out on the work relief wages which they get without sacrificing standards of nourishment.

We must assume, then, that the large mass of people on relief are going to live on borderline, if not inadequate diets. No one is prepared at the present moment to predict the consequences of this deficiency. If economic conditions change favorably within a reasonable period of time, probably very little harm will be done; but if this group of people continue indefinitely on deficient diets we must predict the gradual appearance of its consequences. The lowered state of nutrition can very easily be a background for the development of such diseases as tuberculosis. Certain deficiency diseases are apt to appear. Already we have seen a considerable increase in pellagra; multiple sclerosis is becoming quite common in clinic practice, and whether or not this is related to dietary deficiencies we do not know, though its incidence was considerably increased in Germany during the World War and postwar famine period. The condition of children's teeth is particularly poor. Malnutrition is quite common and the chronic gastro-intestinal patient is prevalent.

PROBLEM OF SPECIAL DIETS

From a purely medical point of view there is another great problem: that of providing special diets for patients. In an administration which must predict its costs and handle its people on a mathematical basis, there is not much leeway in prescribing diets that can be followed practically. Some time ago, whenever a special diet was ordered for a patient the physician's recommendations and his diet list were broken down into its various items, the cost of each item computed, and the total amount of money required to purchase such a diet was added to the patient's budget. The impracticability of this plan is quite evident. Each diet had to be considered individually, and a large staff was necessary to make the proper computations. Much delay was experienced and finally, in many instances, the diet had to be changed to meet with the economic possibilities of the administration. There was often considerable dissatisfaction on the part of the patient because certain expensive items of food were substituted by less expensive items. We have recently changed this system so that now we have what we call SERA diets for many of the common conditions which require dietotherapy. We have evolved standards of smooth diet lists, Sippy regimens, low-fat diets, low and high caloric diets, and pellagra diets. All of these have computed values, and it is now only necessary for a physician to recommend a certain kind of diet and it is put immediately into effect. The special diet department has thrown considerable light onto the type of thing that we are seeing medically. We find that there has been an increasing number of the chronic gastro-intestinal type of patient, for whom we must order smooth diets. Whether or not this is one of the results of poor-feeding habits, is difficult to say. It is quite evident, however, that if the various deficiency diseases and other diseases, such as tuberculosis, begin to increase, the cost to the state to care for these people will be greatly increased as a vicious circle begins to form.

IN CONCLUSION

To reiterate: one cannot say at the present moment just what is happening, and what the results of possible inadequate food habits is having on these people. Preventive measures are always less costly than caring for a situation after it has arisen. Throughout the world, during this depression it is known that public-health measures were the first governmental function to be curtailed. Where millions had been spent in preventive work over a period of years, only a short period of time was necessary for public-health conditions to revert to a primitive state. To re-do this work will mean a probable expenditure much greater than the saving instituted by the curtailment over a short period of time. Whether or not this statement is applicable to what is going on in the United States, I leave to your thought and discussion.

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